Public Notice

US Army Corps of Engineers
Huntington District

In reply refer to: 200201287, Issuance Date:
Public Notice No. 200201321, 200201322 September 24, 2004
Stream: Expiration Date:
Miller Creek October 24, 2004
Address comments to: US Army Corps of Engineers, Huntington District
502 Eighth Street
ATTN: CELRH-F
Huntington, West Virginia 25701-2070

PUBLIC NOTICE: The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

REGULATORY PROGRAM: Since its early history, the U.S. Army Corps of Engineers (Corps) has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the Corps Regulatory Program.

SECTION 10: The Corps is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States (U.S.). The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

SECTION 404: The Corps is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

TO WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act. This notice serves as the Corps of Engineers' request to the West Virginia Department of Environmental Protection to act on Section 401 Water Quality Certification for the following application.

APPLICANT: Consol of Kentucky, Inc.
1800 Washington Road
Pittsburgh, Pennsylvania 15241

LOCATION: The proposed project is located on two unnamed tributaries to Left Fork of Miller Creek, Left Fork Miller Creek, three unnamed tributaries to Miller Creek, two unnamed tributaries to Road Branch, and two unnamed tributaries to Parker Fork of Miller Creek near Nolan, Mingo County, West Virginia as depicted on the attached Drawing 1, labeled "General Location Map." The location of the proposed valley fills and associated sediment ponds is depicted on Drawings 2 - 4 titled "Stream Measurement and Delineation Map."

DESCRIPTION OF THE PROPOSED WORK: The applicant proposes to place fill material into waters of the U.S. for the purpose of surface mining activities. The work includes the

construction of two sediment ponds, two valley fills, a temporary road fill and another temporary access road associated with the MT-13 Surface Mine; two valley fills, two sediment ponds and two road crossings associated with the MT-34 Surface Mine; and three sediment ponds and three valley fills associated with the MT-11 Surface Mine. The applicant received NPDES authorization from the West Virginia Department of Environmental Protection (WVDEP) on April 14, 1997 for these mines (MT-13: WVDEP # S-5039-93; MT-34: S-5040-93; MT-11: S-5038-93) pursuant to the Surface Mining Control and Reclamation Act of 1977. On February 2, 2004, this project was authorized under three separate Nationwide Permit 21 authorizations.

The total impacts to waters of the United States would include 9,617 linear feet of permanent impacts and 3,530 linear feet of temporary impacts. The project would disturb approximately 608 acres.

MT-13 Mine:

Information submitted by the applicant indicated one valley fill on the MT-13 mine (DRF-1301) would impact approximately 405 linear feet of intermittent and 1,031 linear feet of ephemeral stream length of one unnamed tributary to Miller Creek. The associated sediment pond and the conveyance between the toe of the valley fill and the sediment pond would impact an additional 300 linear feet of the same intermittent channel.

A second valley fill on the MT-13 mine (DRF-1302) would impact approximately 790 linear feet of intermittent and 110 linear feet of ephemeral stream length of an unnamed tributary to Left Fork Miller Creek. The associated sediment pond and conveyance would impact an additional 250 linear feet of the intermittent stream.

The road fill would temporarily impact approximately 640 linear feet of an ephemeral portion of Left Fork Miller Creek. The proposed access road would involve the placement of four 60" diameter culverts into 80 linear feet of a perennial portion of Left Fork Miller Creek.

MT-34 Mine:

A third valley fill, the first on the MT-34 mine (DRF-3401), would impact approximately 375 linear feet of one unnamed ephemeral tributary ("Second Right Fork of Parker Fork") to Parker Fork and approximately 529 linear feet of ephemeral channel and 1,246 linear feet of an intermittent channel in Parker Fork. Approximately 20 linear feet of another unnamed ephemeral tributary ("First Right Fork to Parker Fork") to Parker Fork would be impacted for temporary overburden storage. The sediment pond associated with this valley fill (SD-3401) would impact an additional 500 linear feet of intermittent stream channel in Parker Fork.

A fourth valley fill, the second on the MT-34 mine (DRF-3402), would impact approximately 185 linear feet of ephemeral channel and 800 linear feet of intermittent channel on an unnamed tributary to Miller Creek. The associated sediment pond would impact an additional 300 linear feet of intermittent stream channel on the same stream. A road crossing would impact approximately 40 linear feet of Miller Creek, while a second road crossing would impact approximately 40 linear feet of Parker Fork.

MT-11 Mine:

A fifth valley fill, the first on the MT-11 mine (DRF-1101), would impact approximately 600 linear feet of ephemeral stream length of one unnamed tributary to Left Fork Miller Creek. The associated sediment pond and the conveyance between the toe of the valley fill and the sediment pond would impact an additional 350 linear feet of the same ephemeral channel.

A sixth valley fill, the second on the MT-11 mine (DRF-1102), would impact approximately 596 linear feet of an unnamed tributary to Miller Creek. The associated sediment pond and conveyance would impact an additional 260 linear feet of the stream (ephemeral).

Finally, the seventh valley fill, the third on the MT-11 mine (DRF-1103), would impact approximately 2,950 linear feet of two unnamed tributaries to Road Branch, 10 linear feet of which is considered ephemeral while the remaining 2,940 linear feet is intermittent. The associated sediment pond and conveyance would impact an additional 750 linear feet of the intermittent portion of this stream.

Left Fork Miller Creek and Parker Fork are tributaries of Miller Creek. Miller Creek and Road Branch are tributaries to the Tug Fork River, a navigable water of the United States. Table A of this public notice details the proposed mining activities and corresponding information with respect to the proposed impact locations and stream loss (linear feet and acres). The proposed valley fills would drain watersheds of less than 250 acres and range from 8 acres to 107 acres as detailed on Table A of this public notice.

Drawings 2 - 4 labeled "Stream Measurement and Delineation Map" depict the overall mining plans for the MT-13, MT-34, and MT-11 Mines, respectively. Drawings 5 - 7, labeled "Plan—Silt Dam 1101" and "Sections—Silt Dam 3401," show a plan view and cross sections of one of the proposed sediment ponds (1101). A silt dam is an earthen structure placed across the stream bed in order to create an impoundment for directing runoff from the associated valley fill. This impoundment is also known as a sediment pond, as it functions as a catch basin for sediment draining off the fill. Drawings 8 and 9, labeled "Durable Rock Fill 1101" and "Durable Rock Fill 1102" respectively, show plan views, longitudinal views, and typical cross sections for two of the proposed valley fills and associated diversion ditches. The other silt dams, sediment ponds and valley fills in this proposed project will have similar configurations. Drawing 10, labeled "Plan and Section—Road Fill," shows the plan and longitudinal views of the proposed temporary road fill on the MT-13 mine. Drawing 12, labeled "Stream Crossing Location Map," indicates the location of one of the proposed temporary access road crossings (associated with the MT-13 mine). Drawing 13, labeled "A-34," shows a plan and cross section view of one of the proposed temporary access road crossings (associated with the MT-34 mine).

According to the applicant, the purpose of the project is to surface mine bituminous coal.

MITIGATION PLAN: The proposed project would include total permanent impacts of 3,436 linear feet of ephemeral channel and 6,181 linear feet of intermittent channel. Total temporary impacts would include 160 linear feet of perennial channel, 2,100 linear feet of intermittent channel, and 1,270 linear feet of ephemeral channel. The applicant has provided a detailed proposed Stream Mitigation Plan and Stream Restoration Plan in addition to a General Mitigation Agreement that includes measures to minimize impacts to waters of the United States

such as Best Management Practices to ensure no more than the minimum area needed for coal excavation would be disturbed by this activity.

The Stream Mitigation Plan would include the creation of 13,300 linear feet of intermittent stream channel and 13,350 linear feet of ephemeral stream channel. The Stream Restoration Plan would include the restoration of 610 linear feet of ephemeral channel and 2,100 linear feet of intermittent channel associated with the sediment ponds, in addition to 160 linear feet of perennial channel associated with road crossings. All of these channels are also proposed to have 25-foot riparian buffers established on each side of the restored/created channel. The 25-foot riparian buffer zone would be established on both sides of all restored channels, using NRCS-recommended planting plans and native vegetation. The Stream Mitigation Plan included a contingency plan of corrective measures should the proposed mitigation not meet performance standards of flow requirements, and the planting success was proposed to be 80%. The proposed Stream Mitigation Plan includes a statement "...if connectivity [of the created channels] to waters of the U.S. cannot be documented, additional channels will be designed and installed to ensure the mitigation channels are hydrologically connected to existing waters." The Stream Mitigation Plan also would include identical stream design, planting, and contingency plans as in the Stream Restoration Plan.

A total of 6,181 linear feet of created intermittent channel is proposed to compensate for intermittent stream impacts. A total of 4,096 linear feet of created ephemeral channel (660 l.f. temporary plus 3,436 l.f. permanent) is proposed to compensate for ephemeral stream impacts. For the remaining created channels (7,119 linear feet of intermittent and 9,254 linear feet of ephemeral), the applicant wishes to place in reserve for impacts associated with future projects.

Drawings 14-16, labeled "Stream Measurement and Delineation Map," show an overall plan view for the proposed mitigation streams on the MT-13, MT-34 and MT-11 mines, respectively. Drawings 17 - 18, labeled "Stream Restoration Plan," show plan views of the proposed restoration of the stream channels affected by sediment ponds 3401 and 3402, respectively. Restoration of the other streams proposed to be impacted by this project's sediment ponds has similar plan views to these. Finally, Drawing 19 labeled "Sediment Ditch/Stream Channel," shows a typical cross section view of the proposed restoration and created stream channels.

WATER QUALITY CERTIFICATION: Section 401 Water Quality Certification is required for this project. The WV Department of Environmental Protection granted Certification for the MT-13 mine on May 28, 2004, and the MT-11 and MT-34 mines on May 25, 2004. All conditions and requirements of the Certifications would be made a part of this authorization, if approved.

HISTORIC AND CULTURAL RESOURCES: The National Register of Historic Places (NRHP) has been consulted and it has been determined there are no properties currently listed on the register that are in the area affected by the project. This office previously coordinated with the WV Division of Culture and History during review for authorization under Nationwide Permit #21 concerning the proposed projects. The WV Division of Culture and History indicated no "...historical, architectural, or archaeological sites listed in or eligible for inclusion in the National Register of Historic Places will be affected by [these] project[s]." A copy of this public notice will be sent to the State Historic Preservation Office for their review.

ENDANGERED/THREATENED SPECIES REVIEW: This project is located within the known or historic range of the following federally-listed species:

Bald Eagle
Indiana Bat
Virginia Big-Eared Bat
Eastern Cougar

The applicant has provided the results of mist net surveys for Indiana bats conducted in late summer of 2003 on all three mining areas. No Indiana bats or Virginia big-eared bats were captured during these surveys. The results of these surveys were forwarded to the U.S. Fish and Wildlife Service for their review. Based on their review of the surveys, the agency concluded "...no federally listed endangered and threatened species are expected to be impacted by [these] project[s]."

This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

PUBLIC INTEREST REVIEW AND COMMENT: Any person who has an interest that may be adversely affected by the issuance of a permit may request a public hearing. The request must be submitted in writing to the District Engineer on or before the expiration date of this notice and must clearly set forth the interest which may be adversely affected and the manner in which the interest may be adversely affected by the activity.

Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of

Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

If you have any questions concerning this public notice, please call Jim Spence of the South Regulatory Section at 304-399-5710.

Ginger Mullins, Chief
Regulatory Branch

(W)

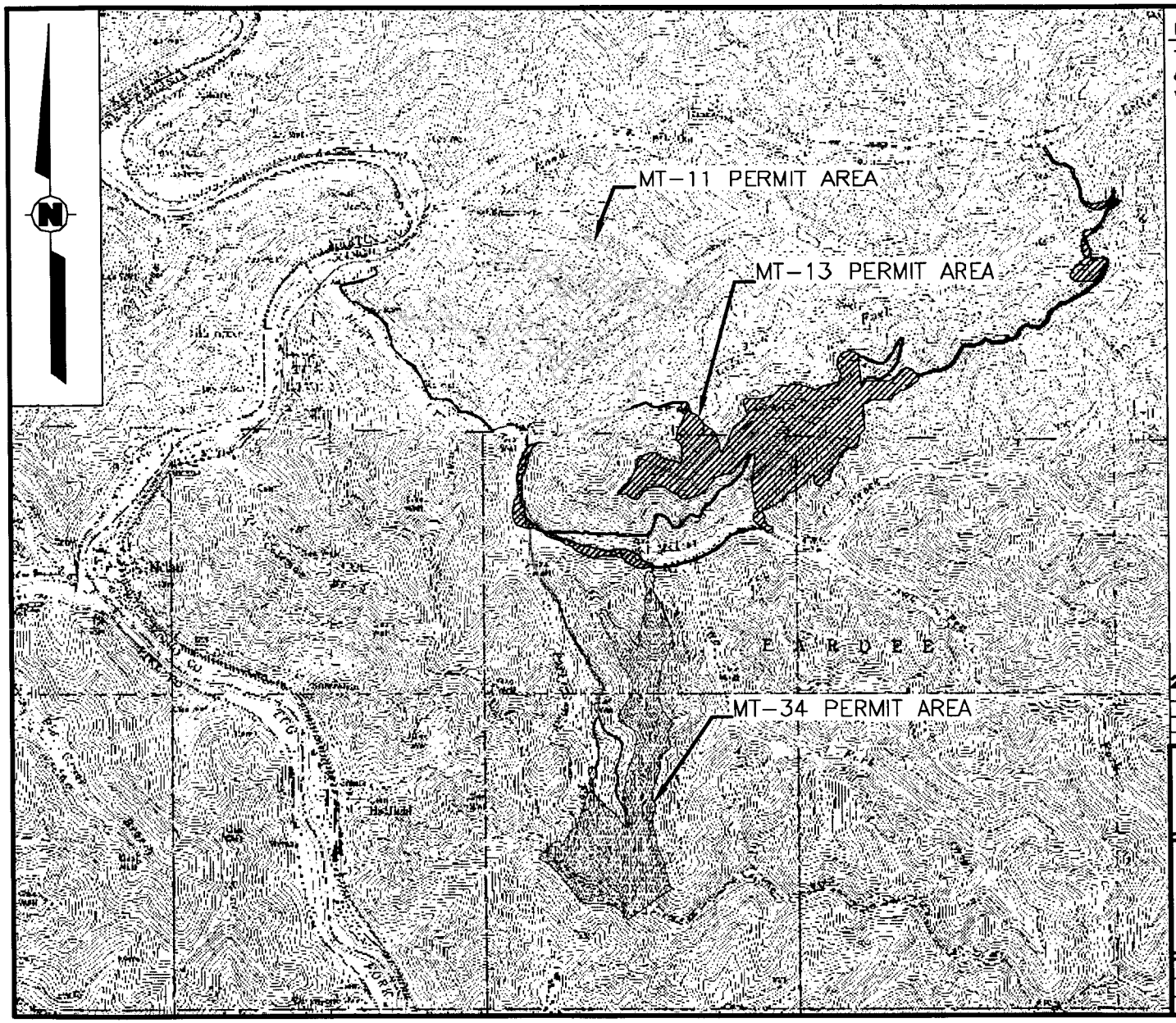
Table A

Consol of Kentucky, Inc.
200201287-UN Trib Let Fork Miller Creek WVDEP Application No. S-5039-93
200201321-Parker Fork WVDEP Application No. S-5040-93
200201322-UN Trib to Miller Creek WVDEP Application No. S-5038-93

Mining Activities	Location	Extent of PERMANENT Impacts (Linear Feet)			Extent of TEMPORARY Impacts (Linear Feet)			Cumulative Acres of Impact	Drainage Area (Acres)
		Perennial	Intermittent	Ephemeral	Perennial	Intermittent	Ephemeral		
Sediment Pond (SD 1301)	U/T Miller Creek	•	•	•	•	300	•	0.024	82.0
Hollow Fill (DRF-1301)	U/T Miller Creek	•	405	1031	•	•	•	0.130	79.0
Sediment Pond (SD 1302)	U/T Left Fork Miller Creek	•	•	•	•	250	•	0.017	48.5
Hollow Fill (DRF 1302)	U/T Left Fork Miller Creek	•	790	110	•	•	•	0.053	46.2
Road Fill	Left Fork Miller Creek	•	•	•	•	•	640	0.022	23.0
Access Road	Left Fork Miller Creek	•	•	•	80	•	•	0.029	872.3
Sediment Pond (SD 3401)	Parker Fork	•	•	•	•	500	•	0.049	119.02
Temporary Overburden	Right Fork of Parker Fork	•	•	•	•	•	20	0.002	22.1
Hollow Fill (DRF-3401)	Second Right Fork of Parker Fork	•	•	375	•	•	•	0.033	8.1

Hollow Fill (DRF-3401)	Parker Fork	•	1246	529	•	•	•	0.322	86.0
Sediment Pond (SD 3402)	U/T Miller Creek	•	•	•	•	300	•	0.027	50.0
Hollow Fill (DRF-3402)	U/T Miller Creek	•	800	185	•	•	•	0.088	42.9
Access Road (A-34)	Miller Creek	•	•	•	40	•	•	0.061	4,665
Access Road (A-34)	Parker Fork	•	•	•	40	•	•	0.022	451.8
Sediment Pond (SD 1101)	U/T Left Fork Miller Creek	•	•	•	•	•	350	0.041	51.5
Hollow Fill (DRF-1101)	U/T Left Fork Miller Creek	•	•	600	•	•	•	0.05	42.2
Sediment Pond (SD 1102)	U/T Miller Creek	•	•	•	•	•	260	0.02	60.3
Hollow Fill (DRF-1102)	U/T Miller Creek	•	•	596	•	•	•	0.033	54.7
Sediment Pond (SD 1103)	U/T Road Branch	•	•	•	•	750	•	0.079	141.9
Hollow Fill (DRF-1103)	2 U/T Road Branch	•	2940	10	•	•	•	0.328	107.3
Total (Permanent and Temporary Impacts)		•	6181	3436	160	2100	1270	**1.430**	
			9617			**3530**			
		13147							

Drawing 1 of 19



REFERENCE:

TOPOGRAPHY FROM 7.5 MIN. USGS QUADRANGLES OF NAUGATUCK AND WILLIAMSON WEST VIRGINIA, DATED 1963 (PHOTOREVISED 1975) AND 1992 RESPECTIVELY.

SCALE

2000 0 2000 4000 FEET

REV.	DATE	DESCRIPTION	P.M.

Alliance Consulting, Inc.

Engineers · Constructors · Scientists

GENERAL LOCATION MAP

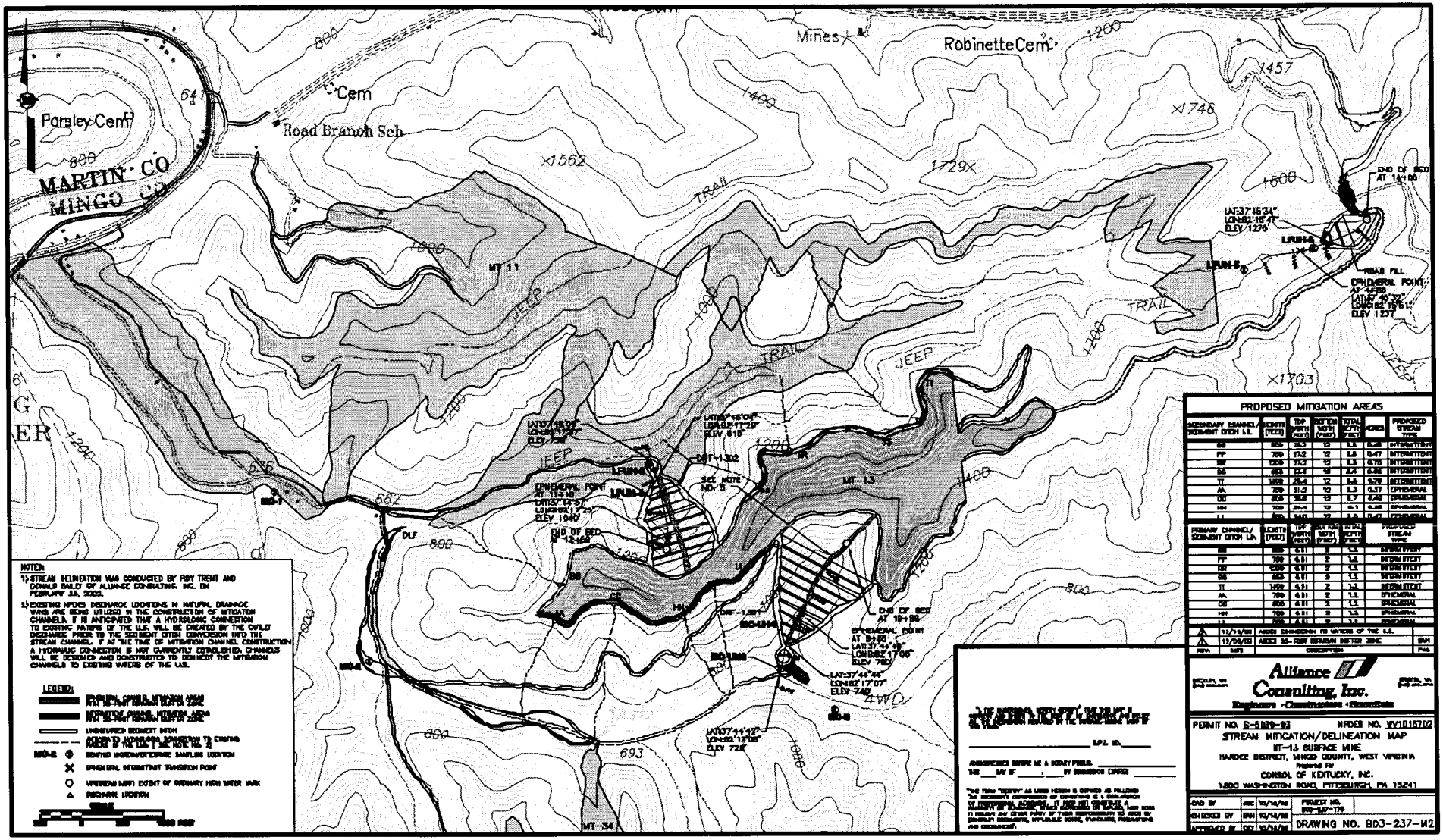
MT-11, MT-13 AND MT-34 SURFACE MINES
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA

Prepared For

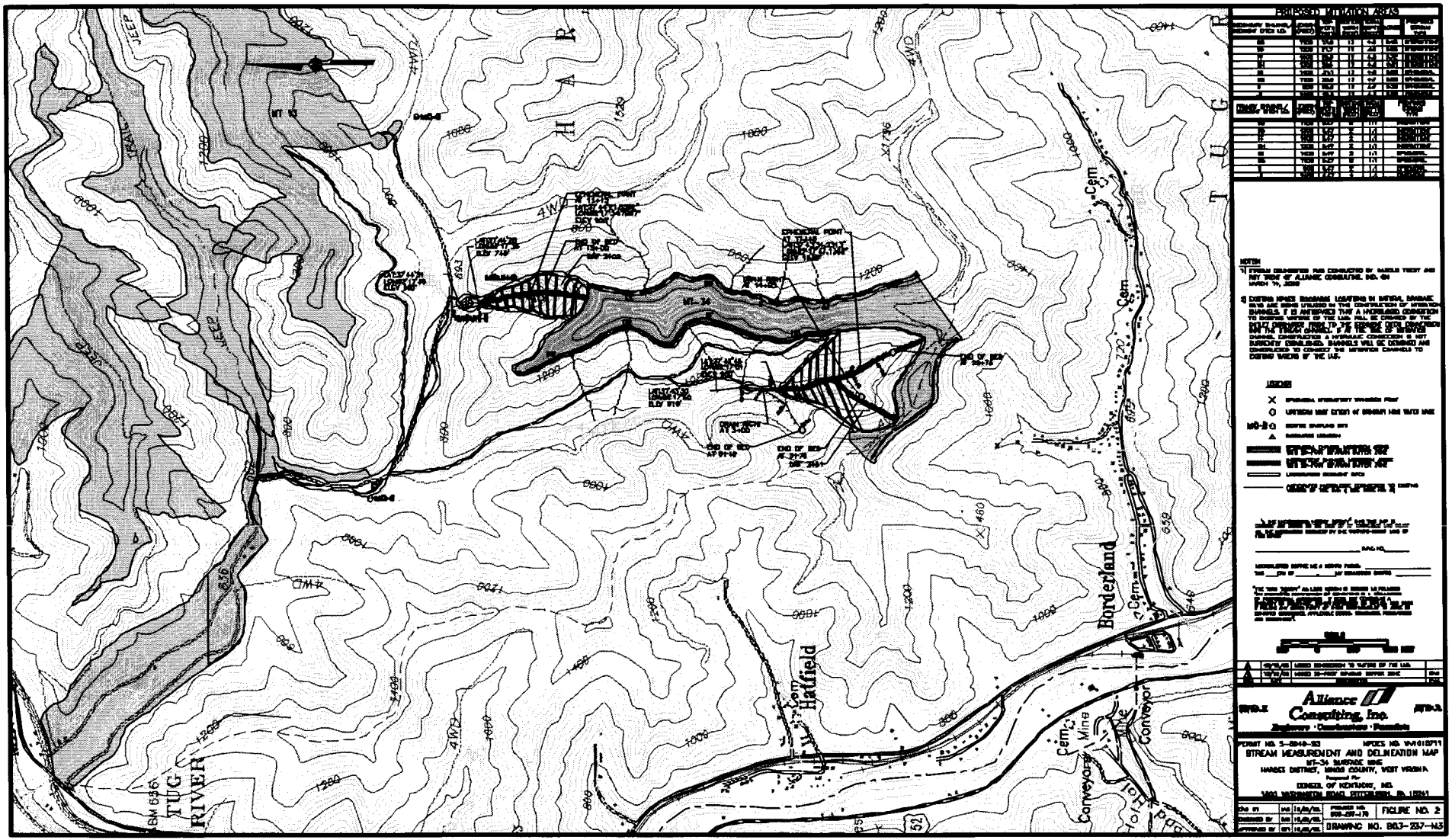
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

CAD BY	JSG	07/24/13	PROJECT NO. 803-237-178	
CHECKED BY				
APPROVED BY			DRAWING NO. 803-237-B1	

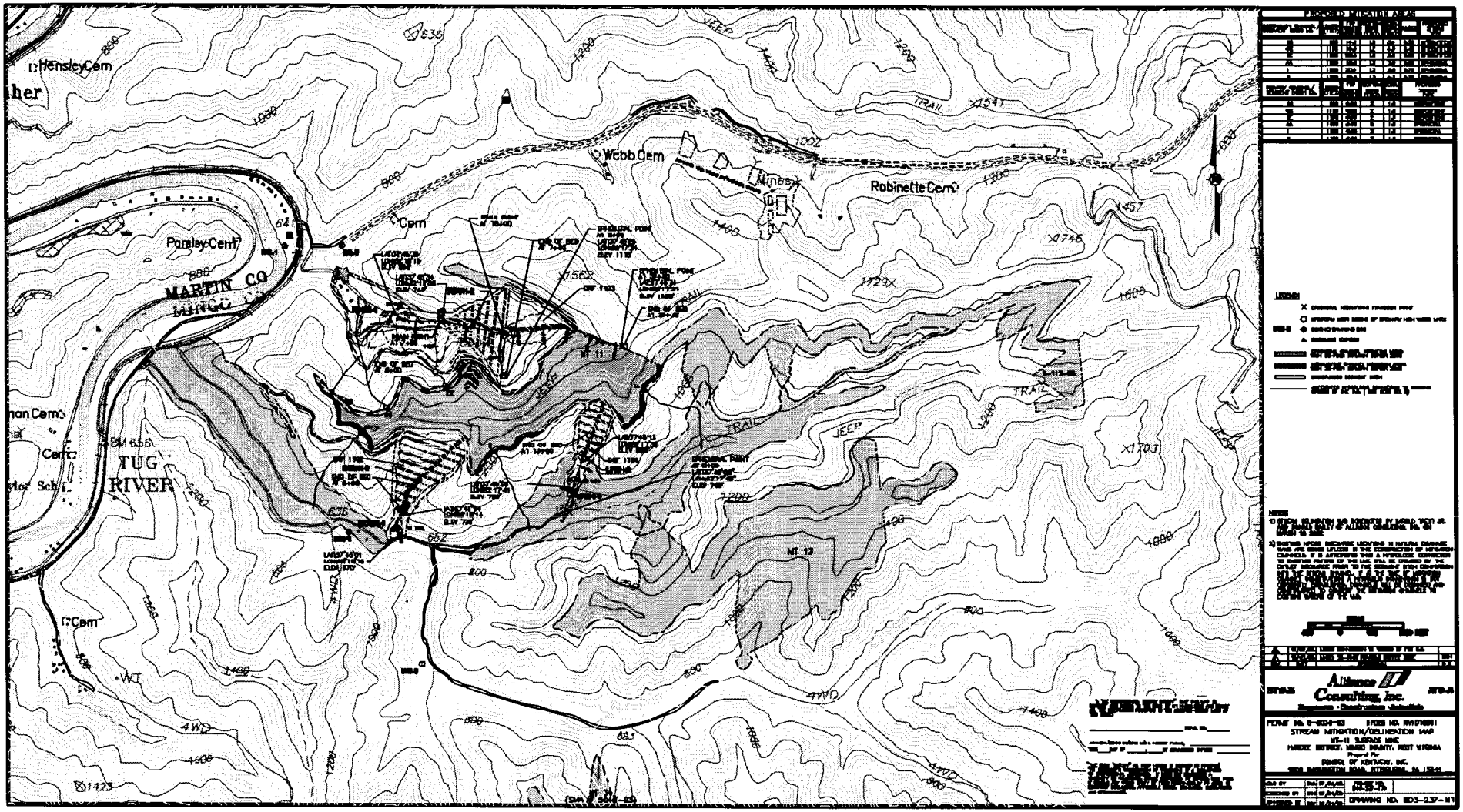
Drawing 2 of 19

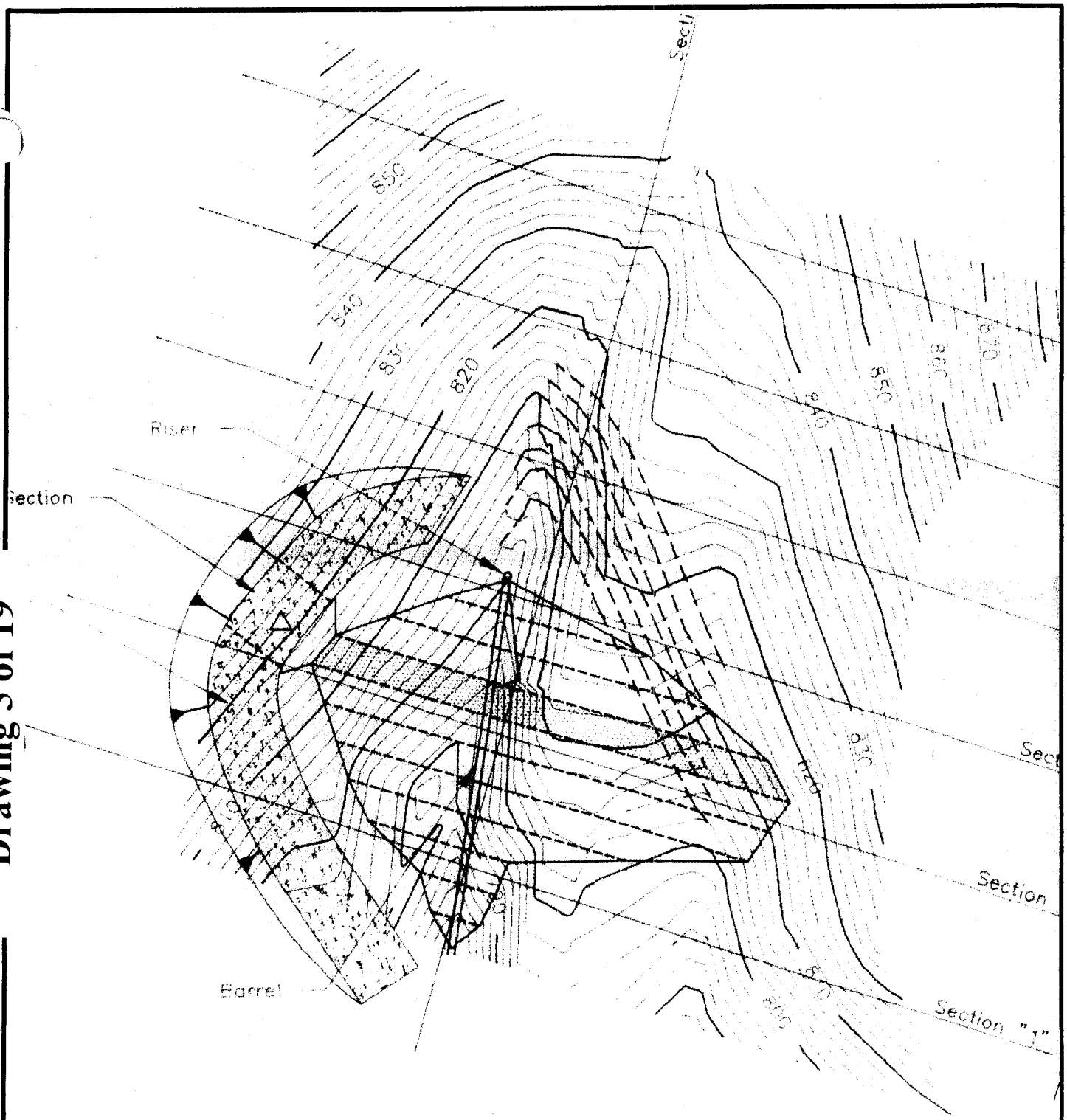


Drawing 3 of 19



Drawing 4 of 19





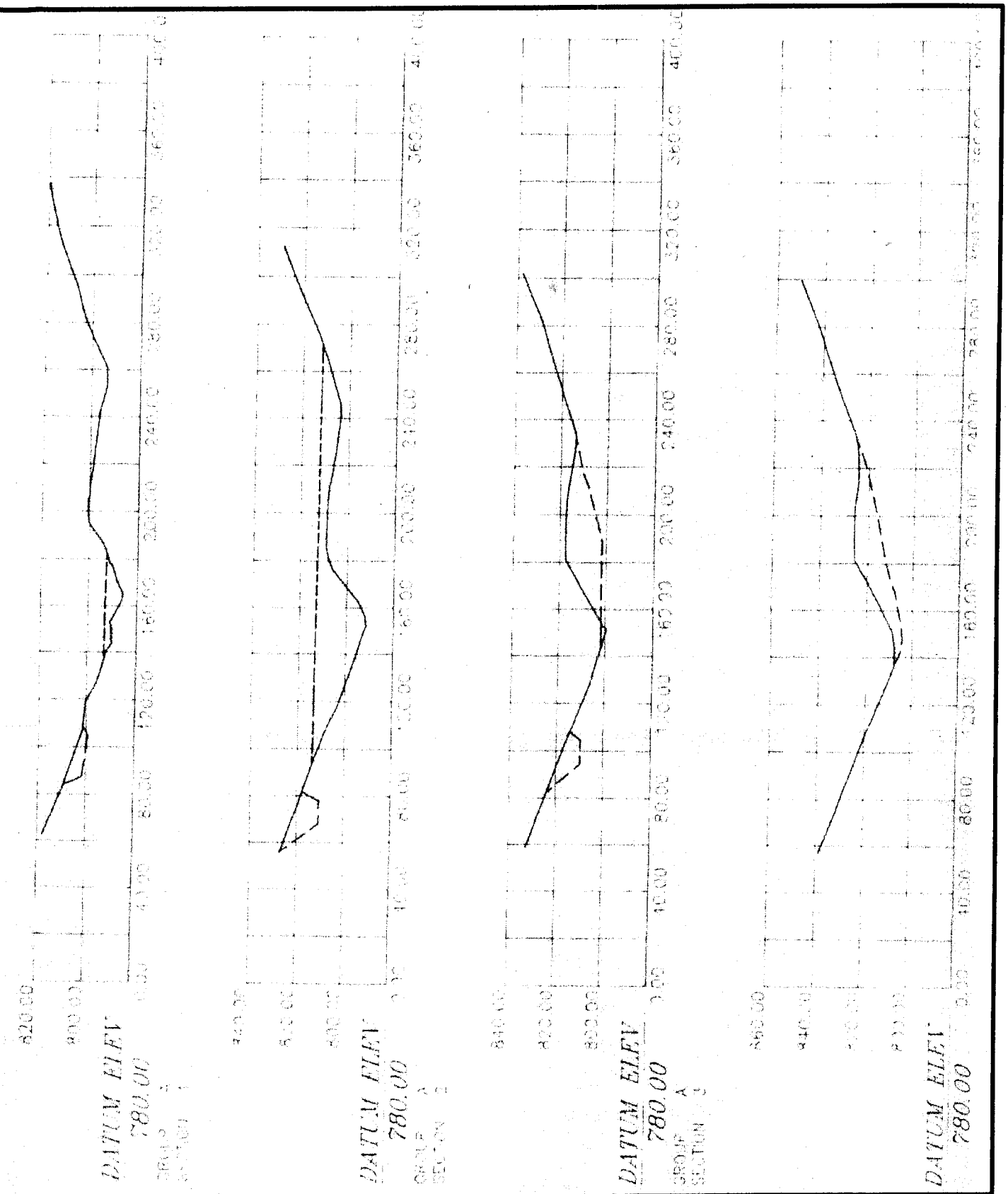
Drawing 5 of 19

Alliance Consulting, Inc.
Engineers
Constructors
Scientists
BECKLEY, WV (304) 255-0491
BRISTOL, VA (540) 466-2710

PLAN – SILT DAM 1101
U.S. ARMY CORP SECTION 404 APPLICATION
MT-11 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
PREPARED FOR
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	LAS	10/23/02
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B02-081-A1		

Drawing 6 of 19



Alliance Consulting, Inc.
Engineers
Constructors
Scientists

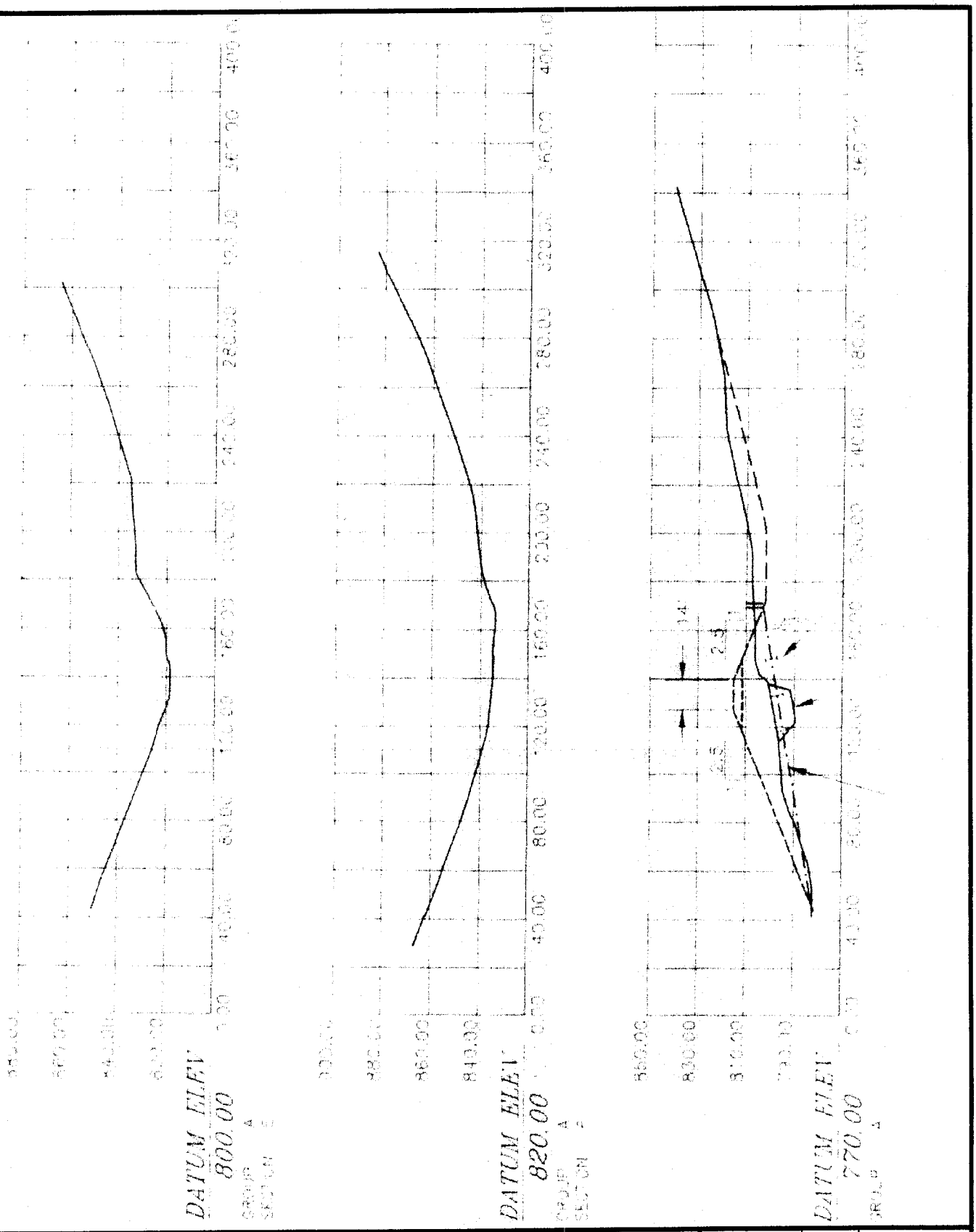
BECKLEY, WV
(304) 255-0491

BRISTOL, VA
(540) 466-2710

SECTIONS – SILT DAM 1101
U.S. ARMY CORP SECTION 404 APPLICATION
MT–11 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
PREPARED FOR
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	LAS	10/23/02
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B02–081–A2		

Drawing 7 of 19

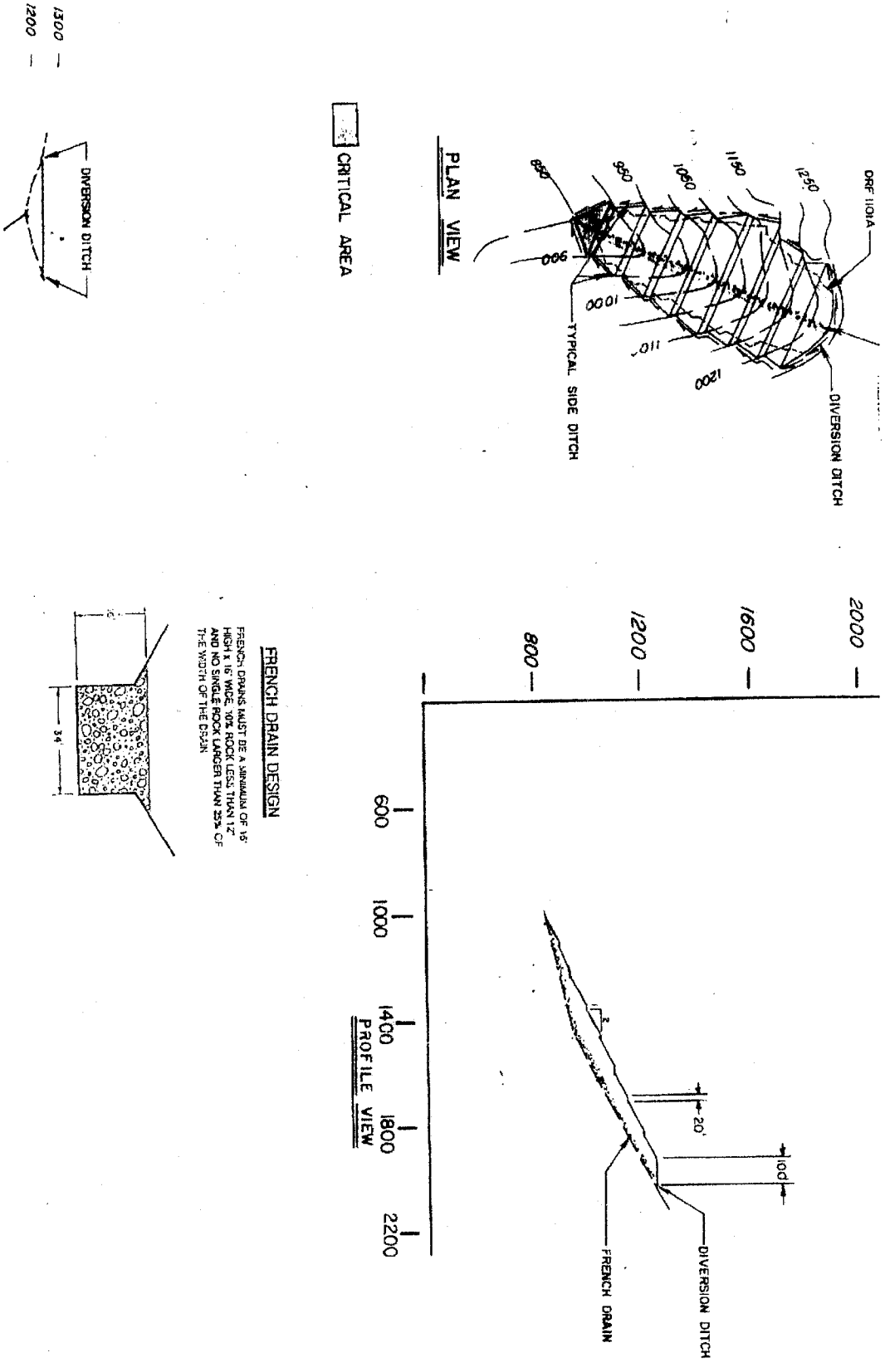


Alliance Consulting, Inc.
Engineers
Constructors
Scientists

BECKLEY, WV (304) 255-0491
BRISTOL, VA (540) 466-2710

SECTIONS – SILT DAM 1101
U.S. ARMY CORP SECTION 404 APPLICATION
MT-11 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
PREPARED FOR
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	LAS	10/23/02
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B02-081-A3		

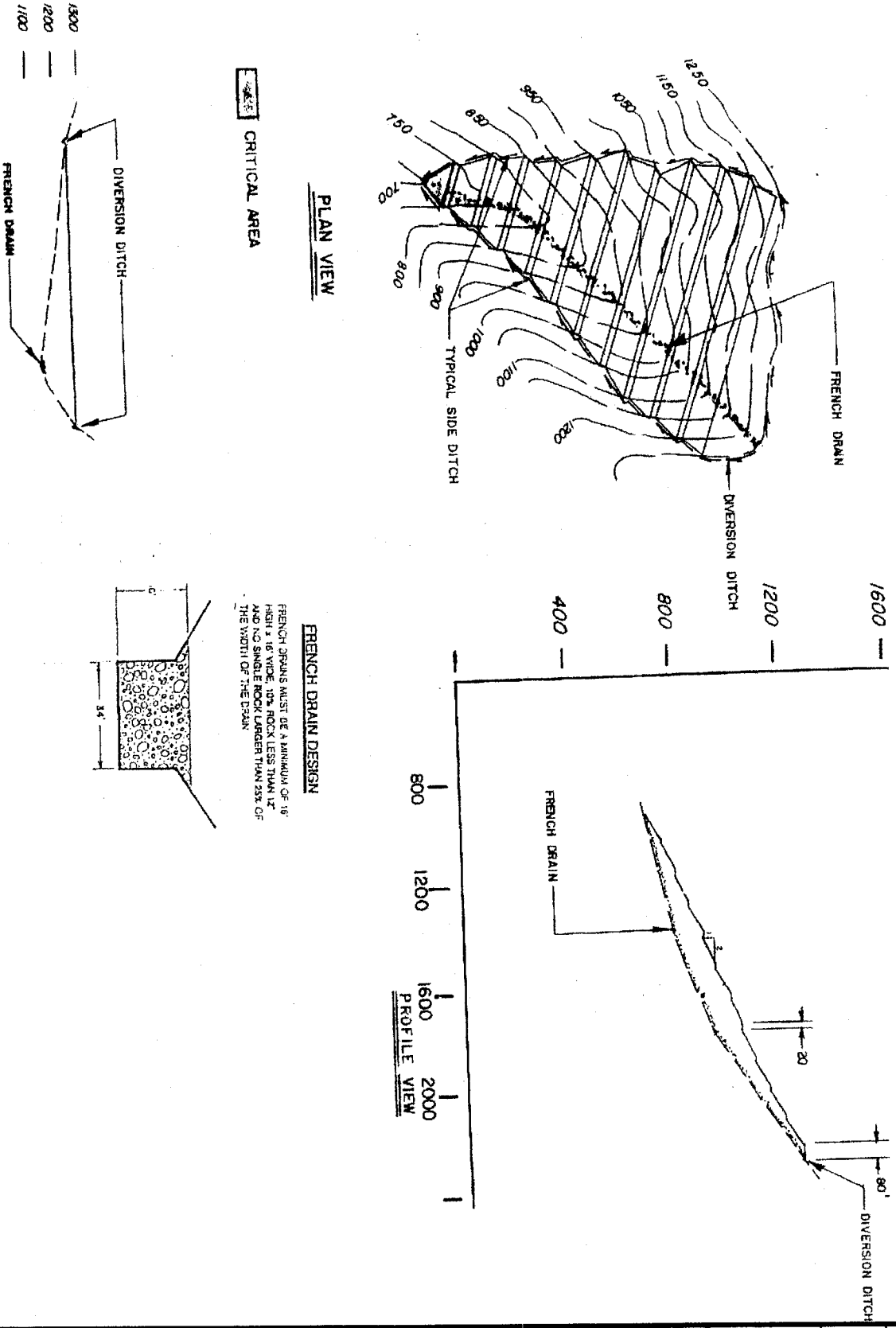


Alliance Consulting, Inc.
Engineers
Constructors
Scientists
BECKLEY, WV (304) 255-0491
BRISTOL, VA (540) 466-2710

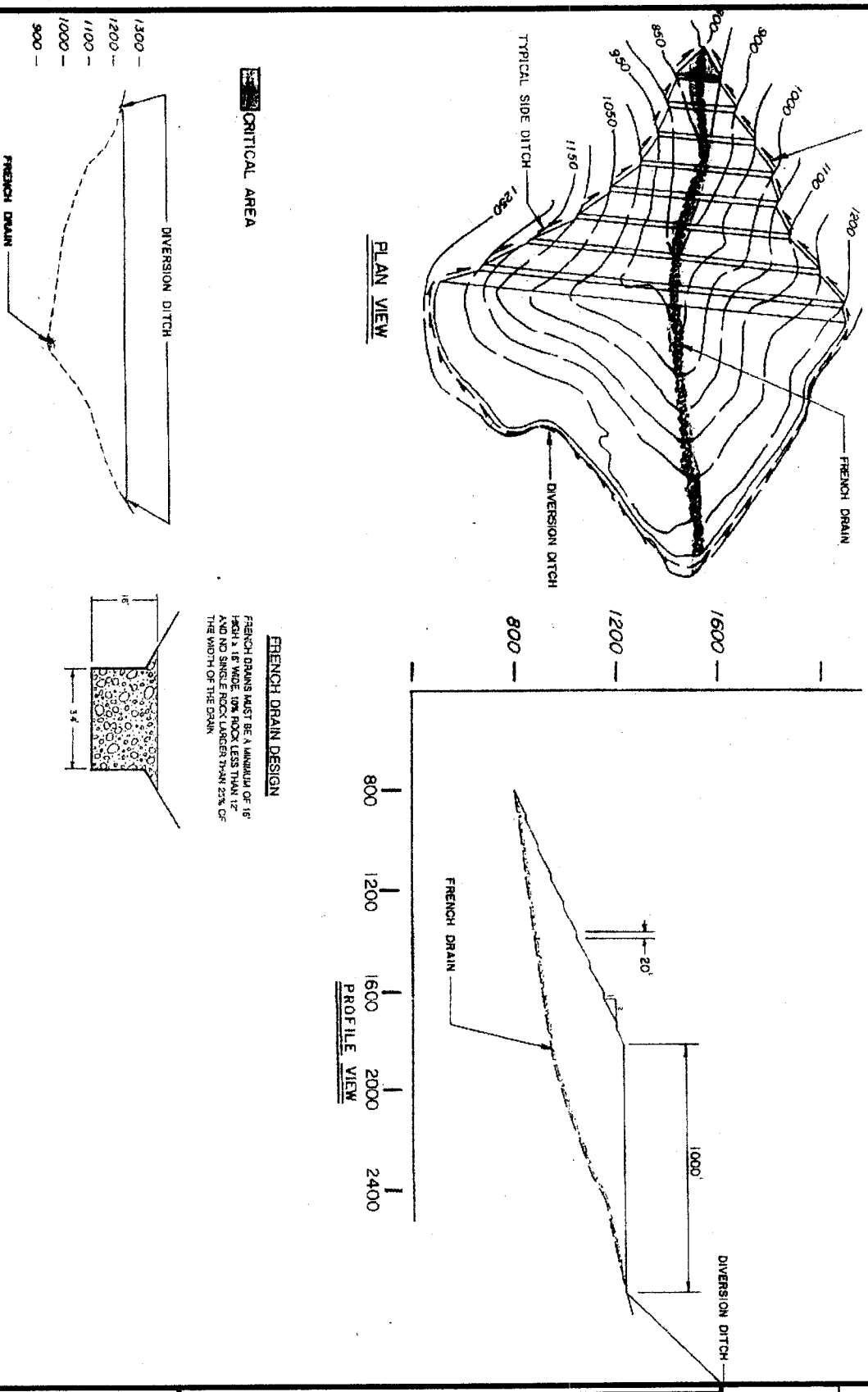
DURABLE ROCK FILL 1101
U.S. ARMY CORP SECTION 404 APPLICATION

MT-11 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
PREPARED FOR
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	LAS	10/23/02
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B02-081-A10		



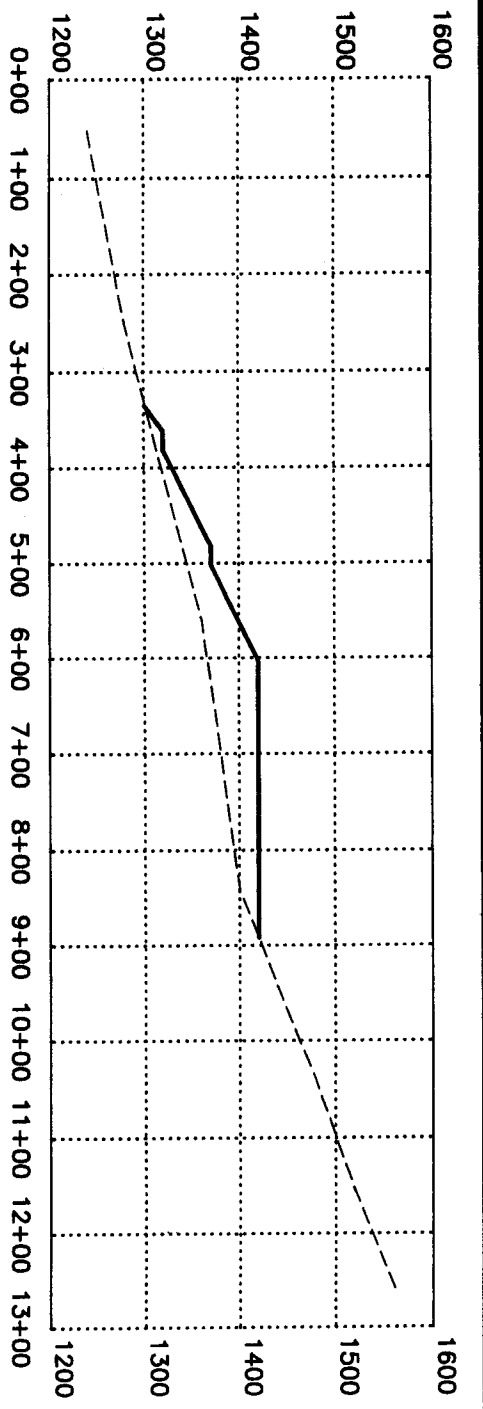
Alliance Consulting, Inc. Engineers Constructors Scientists	BECKLEY, WV (304) 255-0491 BRISTOL, VA (540) 466-2710	DURABLE ROCK FILL 1102 U.S. ARMY CORP SECTION 404 APPLICATION MT-11 SURFACE MINE HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA PREPARED FOR CONSOL OF KENTUCKY, INC. 1800 WASHINGTON ROAD, PITTSBURGH, PA 15241	DRAWN BY: LAS 10/23/02 CHECKED BY: APPROVED BY: DRAWING NUMBER B02-081-A11



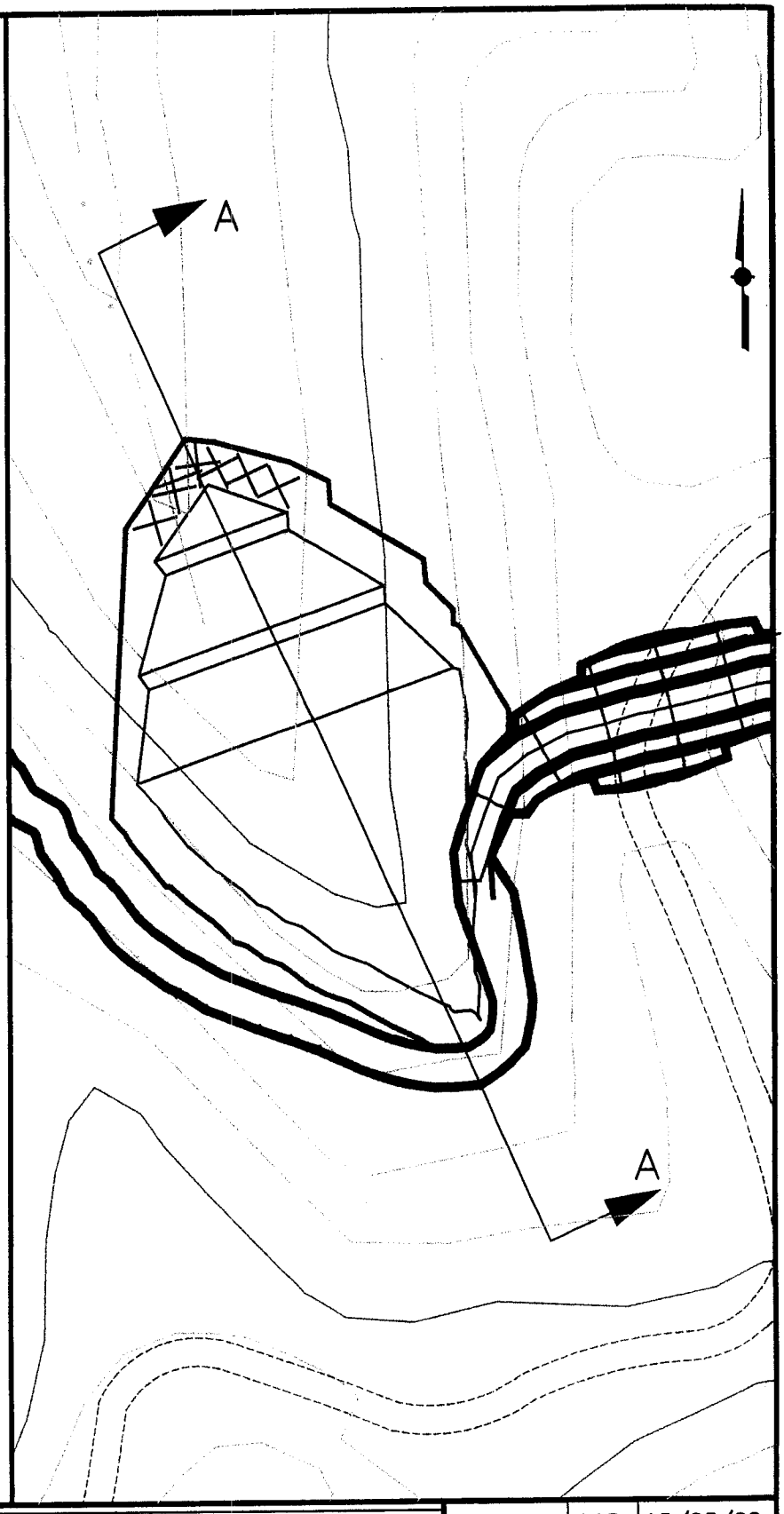
Alliance Consulting, Inc.	DURABLE ROCK FILL 1103 U.S. ARMY CORP SECTION 404 APPLICATION MT-11 SURFACE MINE HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA PREPARED FOR CONSOL OF KENTUCKY, INC. 1800 WASHINGTON ROAD, PITTSBURGH, PA 15241	DRAWN BY: LAS 10/23/02 CHECKED BY: APPROVED BY: DRAWING NUMBER B02-081-A12

Engineers
Constructors
Scientists
BECKLEY, WV (304) 255-0491
BRISTOL, VA (540) 466-2710

Drawing 11 of 19



SECTION A–A



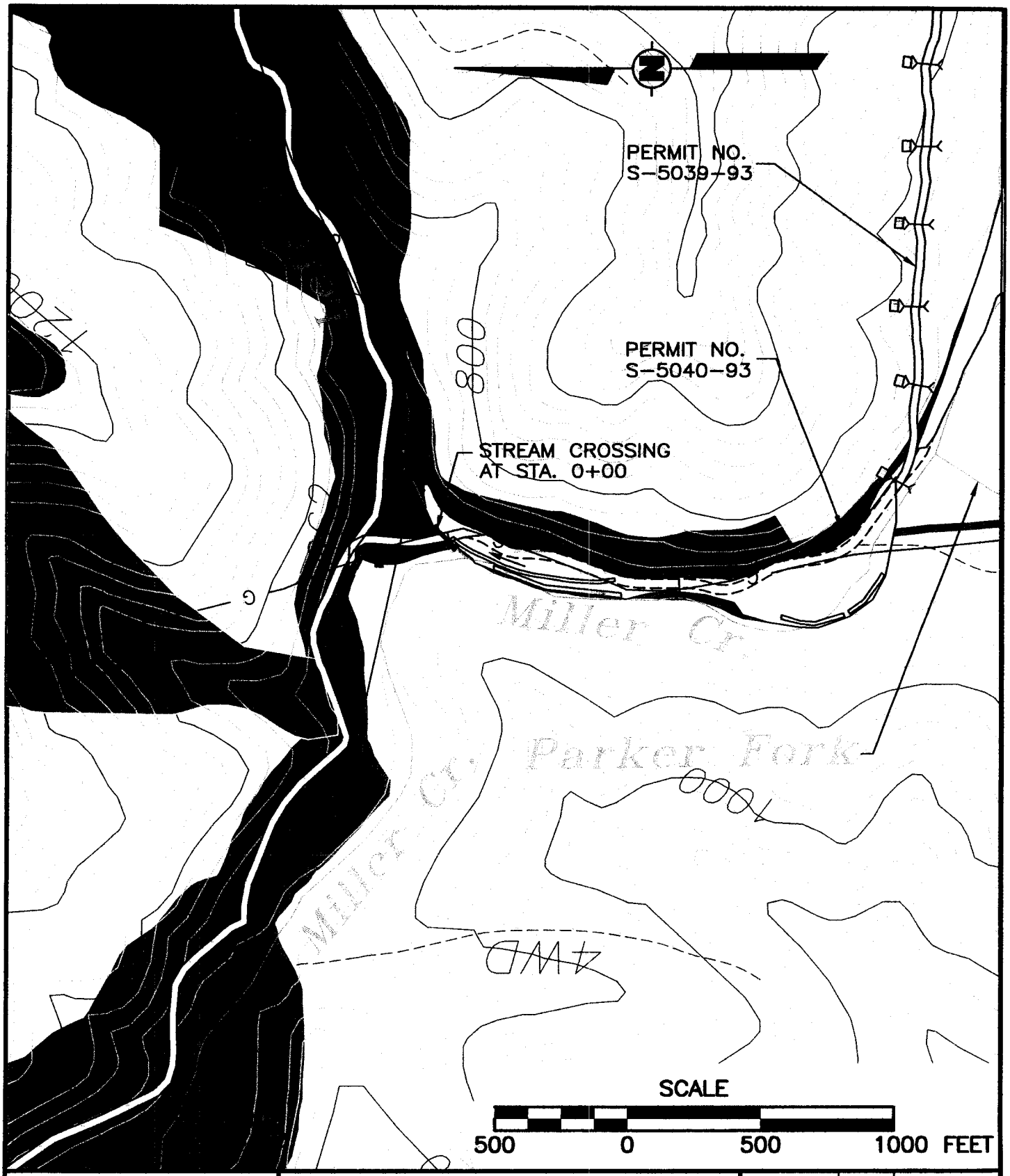
Alliance Consulting, Inc.
Engineers
Constructors
Scientists
BECKLEY, WV (304) 255-0491
BRISTOL, VA (540) 466-2710

PLAN AND SECTION – ROAD FILL
U.S. ARMY CORP SECTION 404 APPLICATION
MT–13 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
PREPARED FOR
APPALACHIAN FUELS, LLC.
1500 NORTH BIG RUN ROAD, ASHLAND, KENTUCKY 41102

DRAWN BY	LAS	10/25/02
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B02–082–A10		

U:\CADDRAWINGS\02082\02082A10.dwg, 10/25/2002 10:32:22 AM, HP1050C.pc3, 1:200

Drawing 12 of 19



Alliance Consulting, Inc.
Engineers
Constructors
Scientists

BECKLEY, WV
(304) 255-0491

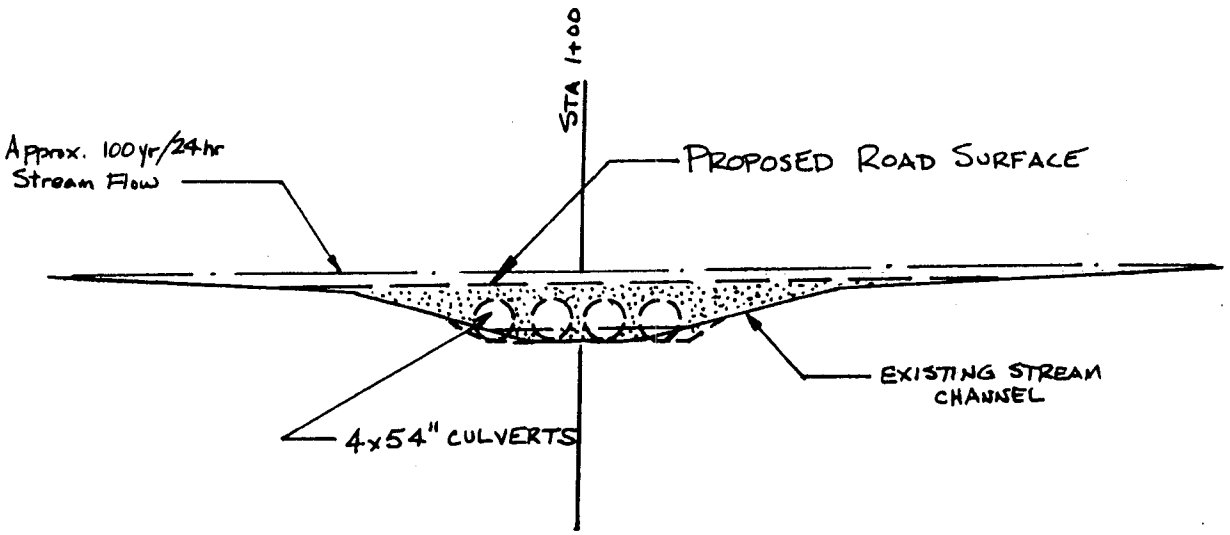
RALEIGH, NC
(919) 861-2267

STREAM CROSSING LOCATION MAP

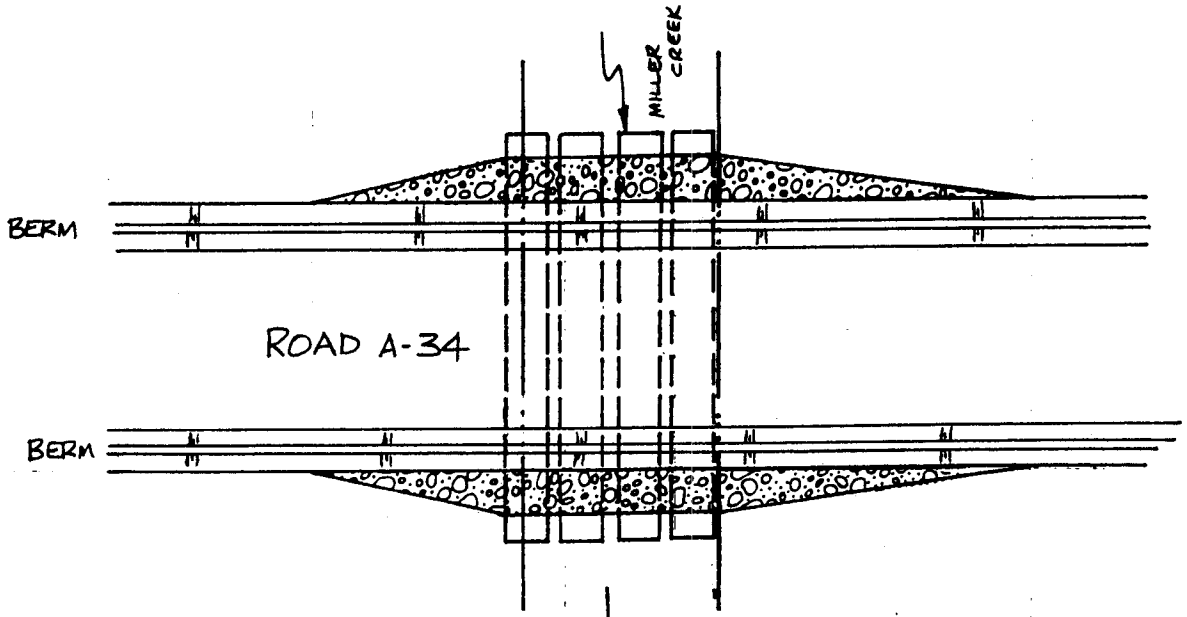
PERMIT NO. S-5039-93
MT-13 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
Prepared For
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	BLA	01/09/04
CHECKED BY	GWB	01/13/04
APPROVED BY	GWB	01/13/04
DRAWING NUMBER		
B04-017-A1		

Drawing 13 of 19



PROFILE



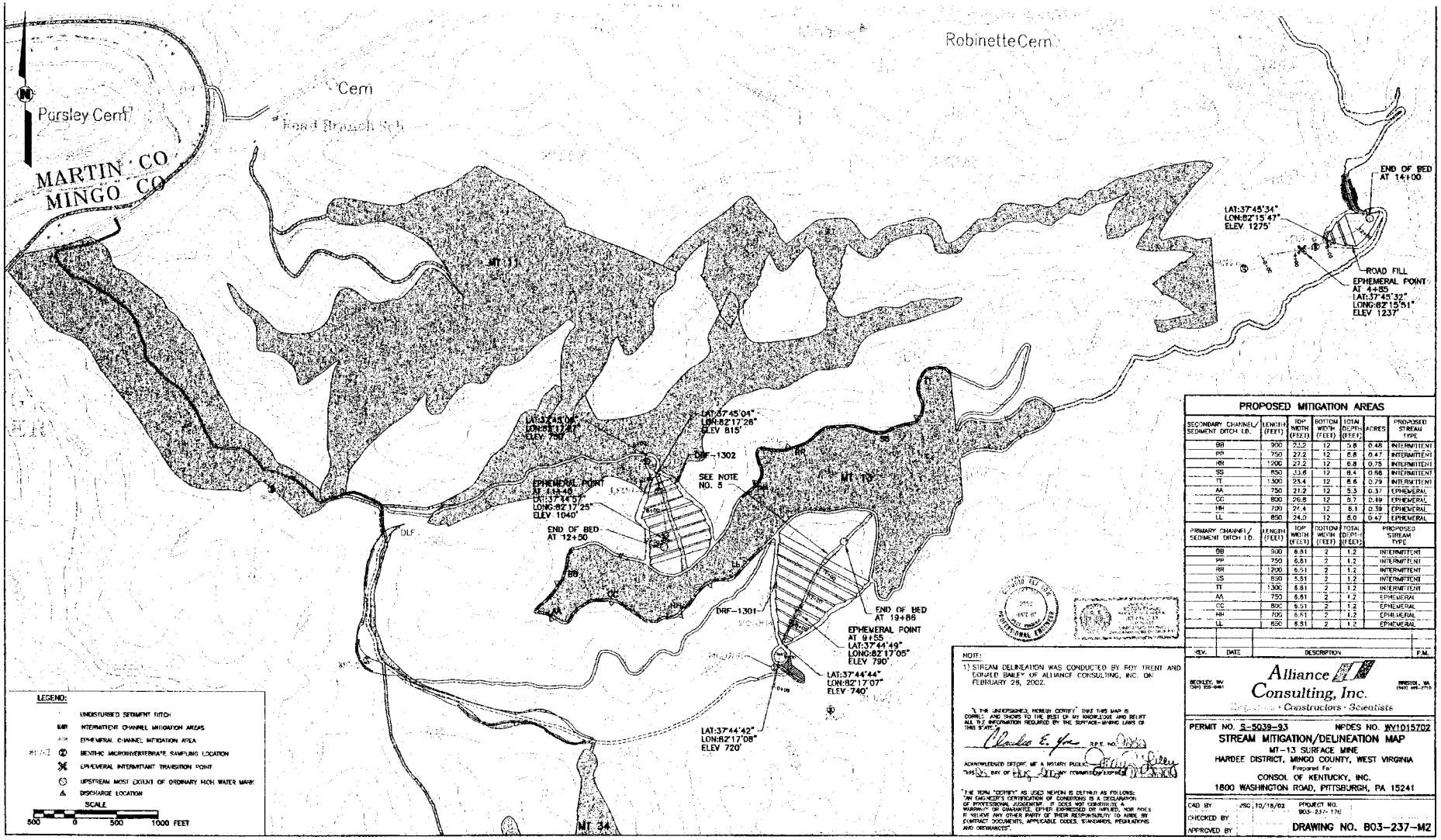
PLAN VIEW

DATE: 1/9/96
SCALE: 1" = 20'
DRAWN BY: A. WILLIS

CONSOL of KY Inc.
ROAD A-34
LOW WATER CROSSING @ 1+00

SUMMIT ENGINEERING, INC.
Pikeville, Kentucky
Lexington, Kentucky
Grundy, Virginia

J-11.c



PROPOSED MITIGATION AREAS

SECONDARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	ACRES	PROPOSED STREAM TYPE
BB	900	23.2	12	5.8	0.48	INTERMITTENT
PP	750	27.2	12	6.8	0.47	INTERMITTENT
RR	1200	27.2	12	6.8	0.75	INTERMITTENT
SS	850	33.6	12	8.4	0.66	INTERMITTENT
TT	1300	25.4	12	6.6	0.79	INTERMITTENT
AA	750	21.2	12	5.3	0.37	EPHEMERAL
CC	800	26.8	12	6.7	0.89	EPHEMERAL
HH	700	27.4	12	6.1	0.39	EPHEMERAL
LL	850	24.0	12	6.0	0.47	EPHEMERAL

PRIMARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	PROPOSED STREAM TYPE
BB	900	6.51	2	1.2	INTERMITTENT
PP	750	6.51	2	1.2	INTERMITTENT
RR	1200	6.51	2	1.2	INTERMITTENT
SS	850	5.51	2	1.2	INTERMITTENT
TT	1300	6.81	2	1.2	INTERMITTENT
AA	750	6.81	2	1.2	EPHEMERAL
CC	800	6.51	2	1.2	EPHEMERAL
HH	700	6.51	2	1.2	EPHEMERAL
LL	850	6.51	2	1.2	EPHEMERAL

NOTE:
1) STREAM DELINEATION WAS CONDUCTED BY ROY TRENT AND DONALD BAILEY OF ALLIANCE CONSULTING, INC. ON FEBRUARY 28, 2002.

"I, THE UNDERSIGNED, HEREBY CERTIFY, THAT THIS MAP IS CORRECT AND SHOWS TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL THE INFORMATION REQUIRED BY THE SURFACE-MINING LAWS OF THIS STATE."

Charles E. Yon P.E. No. [illegible]

ACKNOWLEDGED BEFORE ME A NOTARY PUBLIC [illegible] THIS [illegible] DAY OF [illegible] MY COMMISSION EXPIRES [illegible]

"THE TERM "CERTIFY" AS USED HEREIN IS DEFINED AS FOLLOWS: "AN ENGINEER'S CERTIFICATION OF CONDITIONS IS A DECLARATION OF PROFESSIONAL JUDGEMENT. IT DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED, NOR DOES IT RELIEVE ANY OTHER PARTY OF THEIR RESPONSIBILITY TO ABIDE BY CONTRACT DOCUMENTS, APPLICABLE CODES, STANDARDS, REGULATIONS AND ORDINANCES".

REV.	DATE	DESCRIPTION	P.M.

BECKLEY, WV (304) 255-0481 — BRISTOL, VA (540) 466-2715

Alliance Consulting, Inc.
Engineers · Constructors · Scientists

PERMIT NO. S-5039-93 NPDES NO. WV1015702

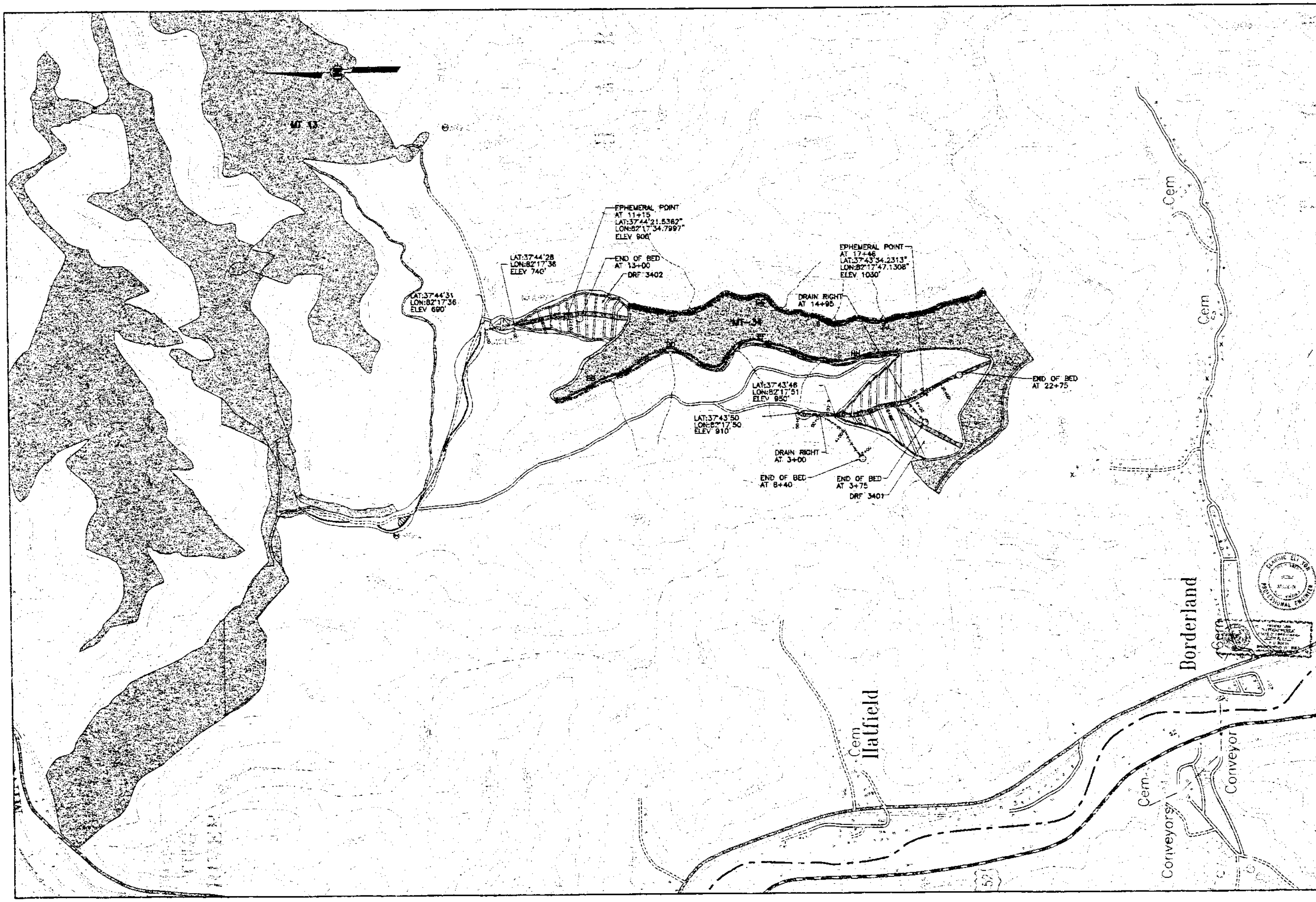
STREAM MITIGATION/DELINEATION MAP

MT-13 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA
Prepared For:
CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

CAD BY JSC | 10/18/02 PROJECT NO. B03-237-176
CHECKED BY
APPROVED BY
DRAWING NO. B03-237-M2

Drawing 14 of 19

Drawing 15 of 19



PROPOSED MITIGATION AREAS						
SECONDARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	ACRES	PROPOSED STREAM TYPE
BB	1100	17.8	12	4.0	0.45	INTERMITTENT
DD	1300	21.7	12	4.8	0.65	INTERMITTENT
FF	1400	22.5	12	4.8	0.72	INTERMITTENT
HH	1300	20.4	12	4.6	0.81	INTERMITTENT
EE	1400	21.1	12	4.6	0.68	EPHEMERAL
GG	1100	20.8	12	4.7	0.53	EPHEMERAL
II	800	20.8	12	4.7	0.38	EPHEMERAL
JJ	2150	19.9	12	4.5	0.98	EPHEMERAL
PRIMARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	PROPOSED STREAM TYPE	
BB	1100	6.47	2	1.1	INTERMITTENT	
DD	1300	6.47	2	1.1	INTERMITTENT	
FF	1400	6.47	2	1.1	INTERMITTENT	
HH	1300	6.47	2	1.1	INTERMITTENT	
EE	1400	6.47	2	1.1	EPHEMERAL	
GG	1100	6.47	2	1.1	EPHEMERAL	
II	800	6.47	2	1.1	EPHEMERAL	
JJ	2150	6.47	2	1.1	EPHEMERAL	

NOTES:

1) STREAM DELINEATION WAS CONDUCTED BY HAROLD TRENT AND ROY TRENT OF ALLIANCE CONSULTING, INC. ON MARCH 14, 2002

2) EXISTING NPDES DISCHARGE LOCATIONS IN NATURAL DRAINAGE WAYS ARE BEING UTILIZED IN THE CONSTRUCTION OF MITIGATION CHANNELS. IT IS ANTICIPATED THAT A HYDROLOGIC CONNECTION TO EXISTING WATERS OF THE U.S. WILL BE CREATED BY THE OUTLET DISCHARGE PRIOR TO THE SEDIMENT DITCH CONVERSION INTO THE STREAM CHANNEL. IF AT THE TIME OF MITIGATION CHANNEL CONSTRUCTION A HYDRAULIC CONNECTION IS NOT CURRENTLY ESTABLISHED, CHANNELS WILL BE DESIGNED AND CONSTRUCTED TO CONNECT THE MITIGATION CHANNELS TO EXISTING WATERS OF THE U.S.

LEGEND:

- EPHEMERAL INTERMITTANT TRANSITION POINT
- UPSTREAM MOST EXTENT OF ORDINARY HIGH WATER MARK
- BENTHIC SAMPLING SITE
- DISCHARGE LOCATION
- EPHEMERAL CHANNEL MITIGATION AREAS WITH 25-FOOT RIPARIAN BUFFER ZONE
- INTERMITTENT CHANNEL MITIGATION AREAS WITH 25-FOOT RIPARIAN BUFFER ZONE
- UNDISTURBED SEDIMENT DITCH
- ANTICIPATED HYDROLOGIC CONNECTION TO EXISTING WATERS OF THE U.S. (SEE NOTE NO. 2)

"I THE UNDERSIGNED, HEREBY CERTIFY* THAT THIS MAP IS CORRECT AND SHOWS TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL THE INFORMATION REQUIRED BY THE SURFACE-MINING LAWS OF THIS STATE."

R.P.E. NO 9252

ACKNOWLEDGED BEFORE ME A NOTARY PUBLIC

THIS 5th DAY OF Jan 2004 MY COMMISSION EXPIRES

*THE TERM "CERTIFY" AS USED HEREIN IS DEFINED AS FOLLOWS: "AN ENGINEER'S CERTIFICATION OF CONDITIONS IS A DECLARATION OF PROFESSIONAL JUDGEMENT. IT DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED. NOR DOES IT RELIEVE ANY OTHER PARTY OF THEIR RESPONSIBILITY TO ABIDE BY CONTRACT DOCUMENTS, APPLICABLE CODES, STANDARDS, REGULATIONS AND ORDINANCES".

SCALE

800 0 500 1000 FEET

REV.	DATE	DESCRIPTION
2	12/18/03	ADDED CONNECTION TO WATERS OF THE U.S.
1	12/02/03	ADDED 25-FOOT RIPARIAN BUFFER ZONE

Alliance Consulting, Inc.

· Constructors · Scientists

PERMIT NO. S-5040-93 NPDES NO. WV101571

STREAM MEASUREMENT AND DELINEATION MA

MT-34 SURFACE MINE

HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA

Prepared For

CONSOL OF KENTUCKY, INC.

1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

CAD BY	LAS 10/21/02	PROJECT NO. 803-237-178	FIGURE NO.
CHECKED BY	BAH 10/21/02	DRAWING NO. 803-237-	
APPROVED BY	CEY 10/21/02		

PROPOSED MITIGATION AREAS

SECONDARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	ACRES	PROPOSED STREAM TYPE
BB	850	14.2	12	3.4	0.28	INTERMITTENT
CC	1100	19.5	12	4.8	0.49	INTERMITTENT
EE	1250	22.5	12	5.5	0.65	INTERMITTENT
AA	1600	15.8	12	3.9	0.56	EPHEMERAL
I	1500	20.4	12	5.0	0.70	EPHEMERAL
LL	1700	19.2	12	4.7	0.75	EPHEMERAL

PRIMARY CHANNEL/ SEDIMENT DITCH I.D.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	PROPOSED STREAM TYPE
BB	850	6.09	2	1.0	INTERMITTENT
CC	1100	6.09	2	1.0	INTERMITTENT
EE	1250	6.09	2	1.0	INTERMITTENT
AA	1600	6.09	2	1.0	EPHEMERAL
I	1500	6.09	2	1.0	EPHEMERAL
LL	1700	6.09	2	1.0	EPHEMERAL

PROPOSED RESTORATION AREAS

SECONDARY CHANNEL POND NO.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	ACRES	PROPOSED STREAM TYPE
SD-1101	450	26.84	18	2.71	0.298	EPHEMERAL
SD-1102	300	29.33	18	2.33	0.202	EPHEMERAL
SD-1103	780 50	34.86	18	4.21	0.664	INTERMITTENT EPHEMERAL

PRIMARY CHANNEL POND NO.	LENGTH (FEET)	TOP WIDTH (FEET)	BOTTOM WIDTH (FEET)	TOTAL DEPTH (FEET)	ACRES	PROPOSED STREAM TYPE
SD-1101	450	9.96	3	1.74	0.103	EPHEMERAL
SD-1102	300	10.38	3	1.85	0.071	EPHEMERAL
SD-1103	780 50	14.84	3	2.96	0.283	INTERMITTENT EPHEMERAL

LEGEND:

- DISCHARGE LOCATION
- EPHEMERAL CHANNEL MITIGATION AREAS WITH 25-FOOT RIPARIAN BUFFER ZONE
- INTERMITTENT CHANNEL MITIGATION AREAS WITH 25-FOOT RIPARIAN BUFFER ZONE
- UNDISTURBED SEDIMENT DITCH
- ANTICIPATED HYDROLOGIC CONNECTION TO EXISTING WATERS OF THE U.S. (SEE NOTE NO. 2)
- HYDROLOGIC CONNECTION WITH 25-FOOT RIPARIAN BUFFER ZONE

NOTE:

PROPOSED HYDROLOGIC CONNECTIONS HAVE BEEN SHOWN WITH A 25-FOOT RIPARIAN BUFFER ZONE. A THREE FOOT AVERAGE WIDTH HAS BEEN ASSUMED FOR ACREAGE CALCULATIONS.

REFERENCE:

TOPOGRAPHY FROM 7.5 MIN. USGS QUADRANGLES OF WILLIAMSON AND NAUGATUCK WEST VIRGINIA

SCALE

500 0 500 1000 FEET

"I, THE UNDERSIGNED, HEREBY CERTIFY* THAT THIS MAP IS CORRECT AND SHOWS TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL THE INFORMATION REQUIRED BY THE SURFACE-MINING LAWS OF THIS STATE."

R.P.E. NO.

ACKNOWLEDGED BEFORE ME A NOTARY PUBLIC,

THIS ___ DAY OF ___ MY COMMISSION EXPIRES ___

*THE TERM "CERTIFY" AS USED HEREIN IS DEFINED AS FOLLOWS: "AN ENGINEER'S CERTIFICATION OF CONDITIONS IS A DECLARATION OF PROFESSIONAL JUDGEMENT. IT DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED, NOR DOES IT RELIEVE ANY OTHER PARTY OF THEIR RESPONSIBILITY TO ABIDE BY CONTRACT DOCUMENTS, APPLICABLE CODES, STANDARDS, REGULATIONS AND ORDINANCES".

REV.	DATE	DESCRIPTION

Alliance Consulting, Inc.
Constructors • Scientists

BECKLEY, WV

PERMIT NO. S-5038-93 NPDES NO. WV1015681

CONSERVATION EASEMENT LOCATION MAP

MT-11 SURFACE MINE

HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA

Prepared For

CONSOL OF KENTUCKY, INC.

1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

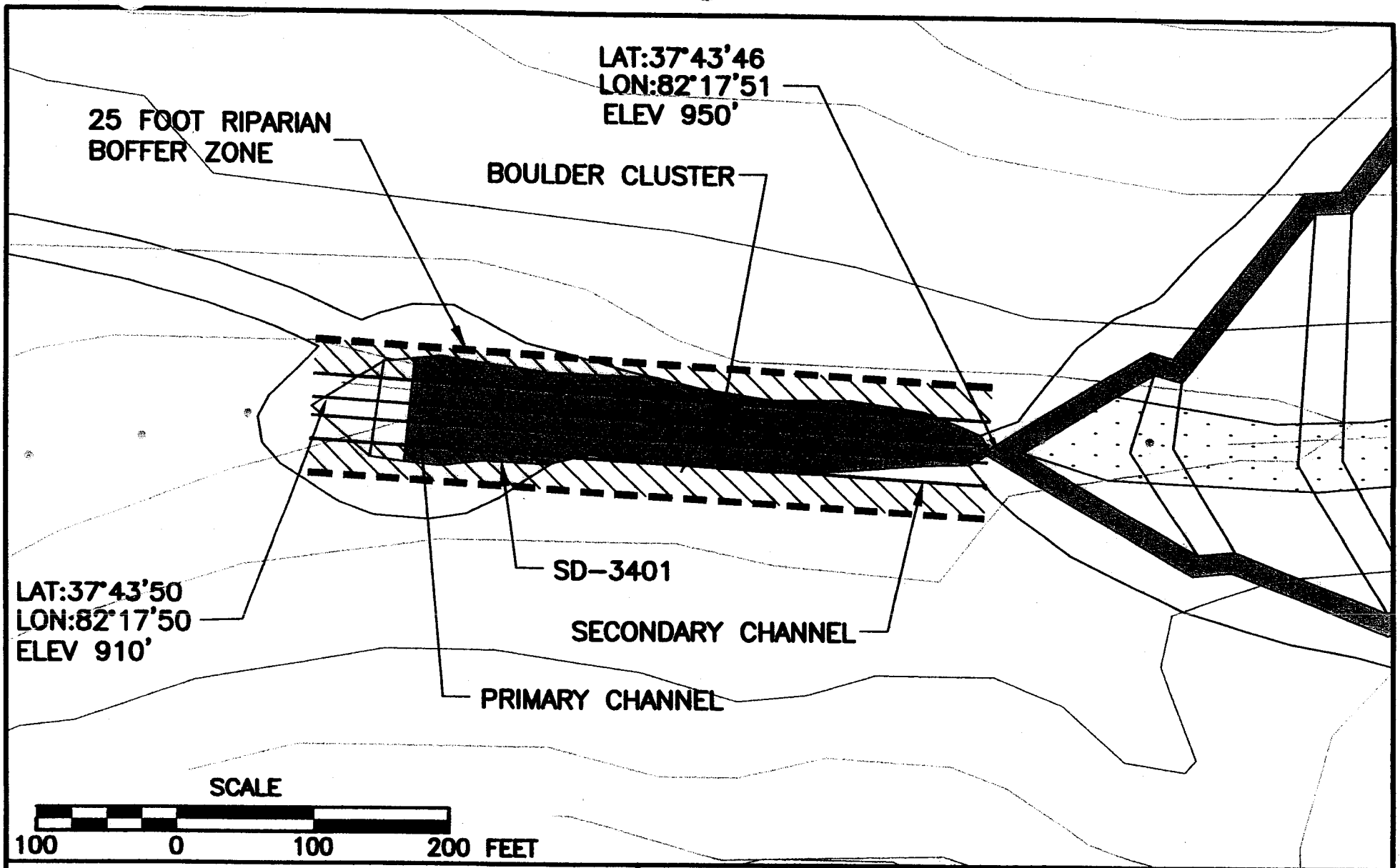
CAD BY DSM 01/14/04 PROJECT NO. 803-237-176

CHECKED BY

APPROVED BY

DRAWING NO. 803-237-M

Drawing 16 of 19



BECKLEY, WV
(304) 255-0491

Alliance Consulting, Inc.
Engineers · Constructors · Scientists

RALEIGH, NC
(919) 861-2267

PERMIT NO. S-5040-93 NPDES NO. WV1015711

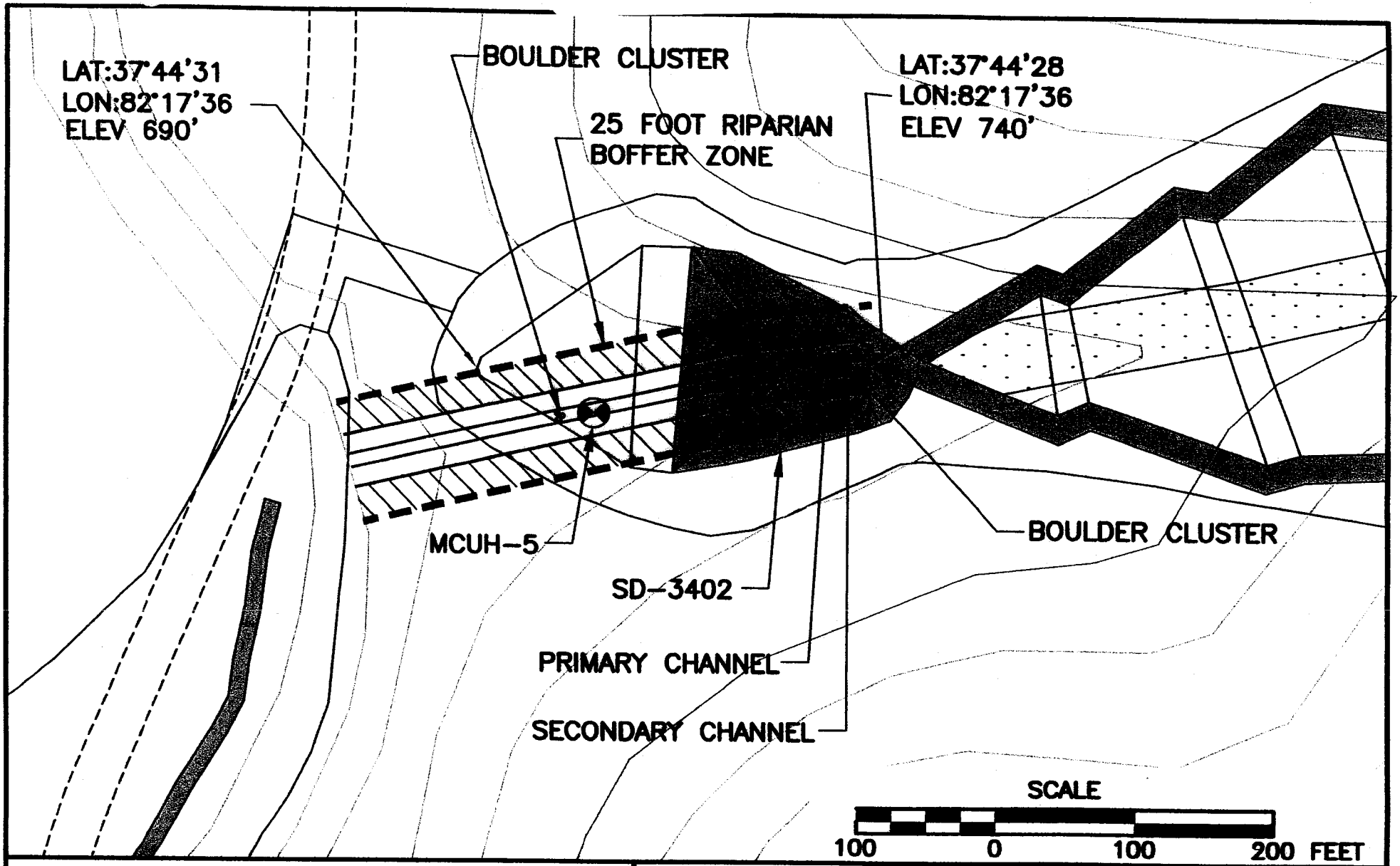
STREAM RESTORATION PLAN

MT-34 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA

PREPARED FOR

CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	JSC	12/16/03
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		FIGURE NUMBER
B03-237-A6		



BECKLEY, WV
(304) 255-0491

Alliance Consulting, Inc.
Engineers · Constructors · Scientists

RALEIGH, NC
(919) 881-2267

PERMIT NO. S-5040-93 NPDES NO. WV1015711

STREAM RESTORATION PLAN

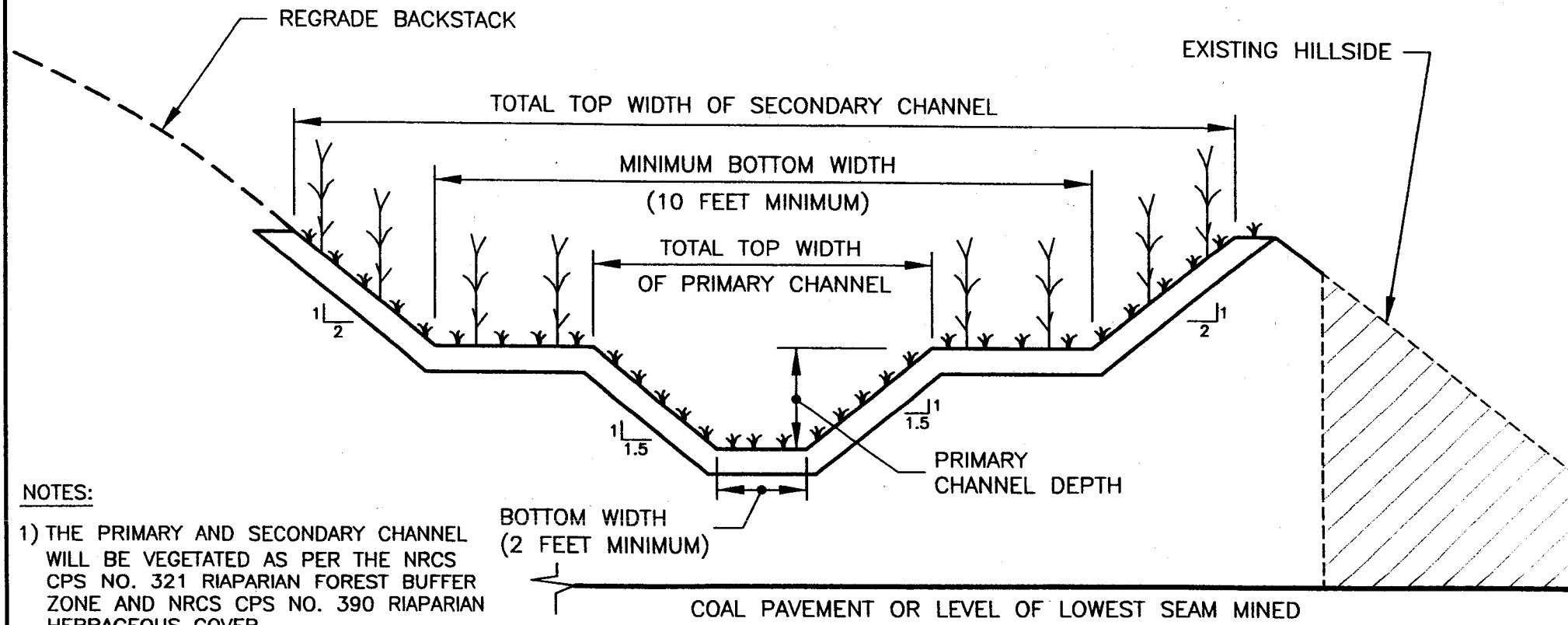
MT-34 SURFACE MINE
HARDEE DISTRICT, MINGO COUNTY, WEST VIRGINIA

PREPARED FOR

CONSOL OF KENTUCKY, INC.
1800 WASHINGTON ROAD, PITTSBURGH, PA 15241

DRAWN BY	JSC	12/16/03
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		FIGURE NUMBER
B03-237-A7		

Drawing 19 of 19



NOTES:

1) THE PRIMARY AND SECONDARY CHANNEL WILL BE VEGETATED AS PER THE NRCS CPS NO. 321 RIAPARIAN FOREST BUFFER ZONE AND NRCS CPS NO. 390 RIAPARIAN HERBACEOUS COVER.

2) THE PRIMARY CHANNEL WILL BE VEGETATED AS PER THE MIXTURE FOUND IN THE RESTORATION PLAN.

3) THE PRIMARY CHANNEL WILL BE CUT WITHIN THE EXISTING SEDIMENT DITCH TO DESIGN SPECIFICATIONS FOR A 2 YEAR 24 HOUR STORM EVENT.

4) ALL CHANNEL DIMENSIONS FOR THE PRIMARY AND SECONDARY CHANNEL WILL VARY AND ARE DEPENDENT UPON THE STREAM DESIGNS CONTAINED WITHIN THE RESTORATION PLAN.

TYPICAL DETAIL

N.T.S.

Alliance Consulting, Inc.
Engineers
Constructors
Scientists
BECKLEY, WV (304) 255-0401
RALEIGH, NC (919) 861-2267

SEDIMENT DITCH/STREAM CHANNEL
MT-11, MT-13 AND MT-34 SURFACE MINES
MINGO COUNTY, WEST VIRGINIA

PREPARED FOR

CONSOL OF KENTUCKY MINING COMPANY
PITTSBURGH, PENNSYLVANIA

DRAWN BY	BLA	07/24/03
CHECKED BY		
APPROVED BY		
DRAWING NUMBER		
B03-237-A1		